

Taxonomic Notes on the Genus *Tympanocryptis* Peters (Lacertilia: Agamidae)

G.M. Storr*

Abstract

Two new subspecies of *Tympanocryptis lineata* Peters are described: *T. l. houstoni* from the Nullarbor Plain and *T. l. macra* from the Kimberley and neighbouring part of Northern Territory. *Tympanocryptis tetraporophora* Lucas and Frost and *T. uniformis* Mitchell are removed from the Western Australian list, and *T. cephalo gigas* Mitchell is merged in *T. cephalo* Günther.

Introduction

Since my revision of *Tympanocryptis* (Storr 1964) the concept of the genus has been amended. *Tympanocryptis parviceps* was transferred to *Amphibolurus*, even though it lacked an external ear opening (Storr 1977). On the other hand *aurita* was placed in *Tympanocryptis* despite its exposed tympanum and numerous femoral and pre-anal pores (Storr 1981).

Four other matters in my earlier paper require amendment. First, the identification of Kimberley specimens as *T. tetraporophora* is now seen to be wrong, and the population from which they came is described as a new subspecies of *T. lineata*. Also wrong was my assumption that the Nullarbor population of *T. lineata* belonged to the nominate race; it too is described as a new subspecies. Recently acquired specimens of *T. cephalo* from the Pilbara are compared with material from the remainder of the species' range. Finally the specimen of '*Tympanocryptis uniformis*' from the Kimberley is re-identified.

With one exception, all the specimens cited in this study are lodged in the Western Australian Museum (R series).

Systematics

Tympanocryptis lineata macra subsp. nov.

Holotype

R44553 in Western Australian Museum, collected by L.A. Smith and R.E. Johnstone on 20 January 1972 at 16 km S of main dam at Lake Argyle, Western Australia, in 16°15'S, 128°40'E.

* Department of Ornithology and Herpetology, Western Australian Museum, Francis Street, Perth, Western Australia 6000.

Paratypes

Kimberley Division (W.A.)

Ord River below main dam, Lake Argyle (11752); Argyle Downs (42728-9, 42734-5, 44552); Old Lissadell (42672-5); King Sound (Macleay Mus. 930); 5 km NNW Mt Percy (70682); Fitzroy Crossing (75123) and 50 km SE (36164).

Northern Territory

40 km SSW Bullo River HS (60330).

Diagnosis

A moderately large, relatively slender subspecies of *T. lineata* Peters, most like *T. l. centralis* Sternfeld but larger and having longer limbs and tail and more subdigital lamellae.

Description

Snout-vent length (mm): 36-64 (N 16, mean 51.8; v. 23-61, 41, 44.8 in *centralis*). Length of appendages (% SVL): foreleg 42-50 (N 14, mean 46.1; v. 36-46, 39, 40.8); hindleg 64-81 (N 14, mean 74.2; v. 52-69, 39, 61.6); tail 137-185 (N 14, mean 166.1; v. 120-175, 37, 149.3). A pre-anal pore discernible in most specimens. Usually no femoral pore (one in one specimen). Lamellae under fourth toe 17-22 (N 14, mean 19.5; v. 15-20, 40, 17.5).

Scales on head strongly keeled. Scales on back varying much in size, the largest being spinose and more strongly keeled than others. No midlateral fold. Gulars weakly keeled and mucronate.

Dorsal and lateral ground colour pale reddish-brown to greyish-brown. A pale grey vertebral stripe and a brownish-white to greyish-white dorsolateral stripe occasionally discernible; vertebral stripe no wider than dorsolateral. Reddish-brown to greyish-brown cross-bands on body, limbs and tail, interrupted by the longitudinal stripes and sometimes barely discernible on body. No pattern on head or indication of midlateral stripe.

Distribution

Semi-arid zone of south and east Kimberley and adjacent part of Northern Territory (see Figure 1).

Remarks

Previously (Storr 1964), this population was confused with *T. tetraporophora* Lucas and Frost, a species (or subspecies of *T. lineata*) confined to the Lake Eyre drainage and characterized by having a femoral pore.

The name *macra* is Latin for 'lean'.

Tympanocryptis lineata houstoni subsp. nov.

Figure 2

Holotype

R53427 in Western Australian Museum, collected by G. Harold, G. Barron and M. Peterson on 25 April 1976 at 10 km SSE of Cocklebidy, Western Australia, in 32°07'S, 126°06'E.

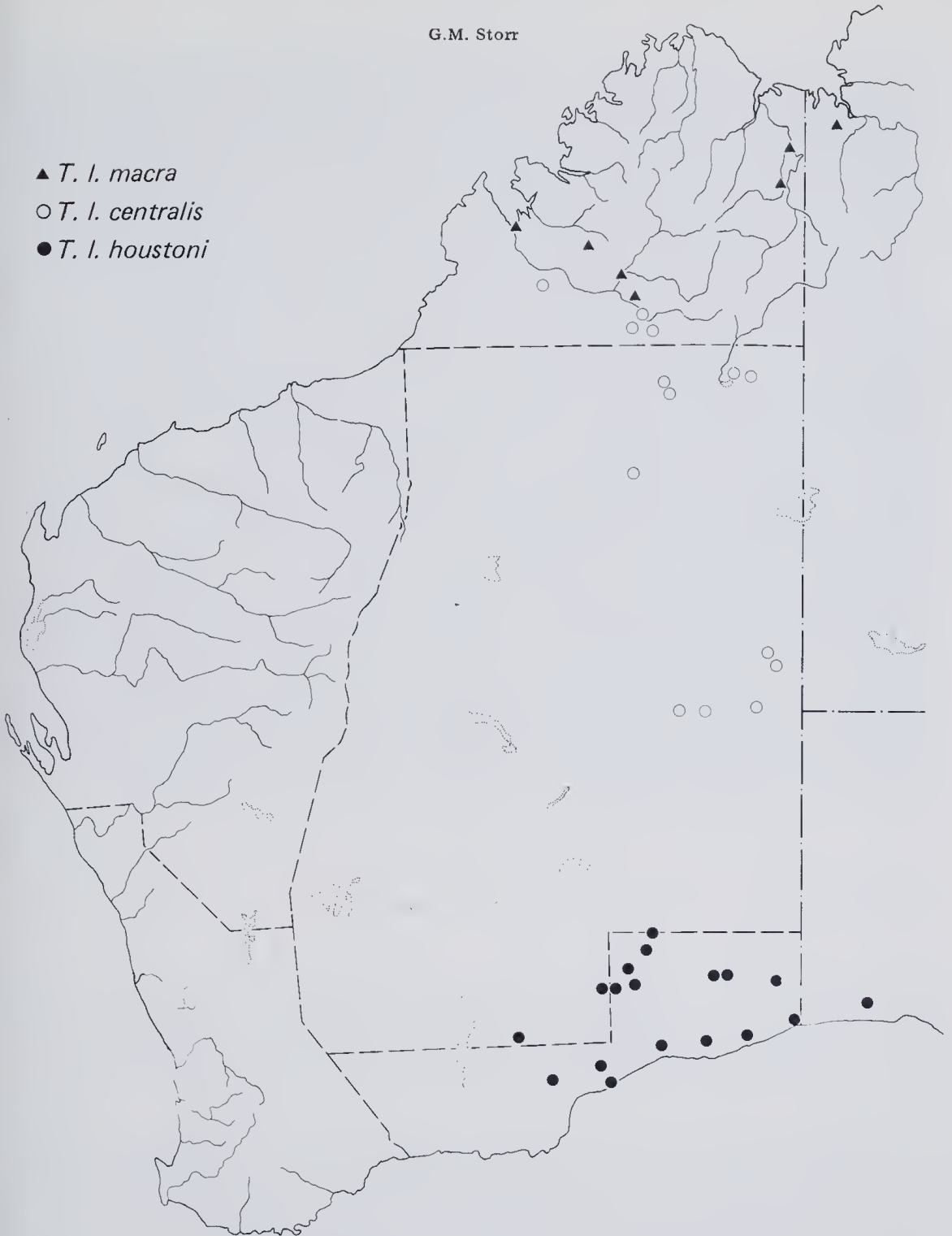


Figure 1 Map of Western Australia showing location of specimens of *Tympanocryptis lineata macra*, *T. l. centralis* and *T. l. houstoni*.



Figure 2 Holotype of *Tympanocryptis lineata houstoni*, photographed in life by G. Harold.

Paratypes

For details of 61 specimens in Western Australian Museum from Western Australia and South Australia, see Material.

Diagnosis

A large subspecies of *T. lineata* Peters, distinguishable from all others by its broad vertebral stripe. Further differing from *T. l. centralis* Sternfeld in its stouter habit, thicker neck and more strongly developed colour pattern (especially on head).

Description

Snout-vent length (mm): 22-68 (N 62, mean 46.5). Length of appendages (% SVL): foreleg 33-48 (N 59, mean 41.9); hindleg 56-80 (N 59, mean 67.0); tail 134-196 (N 62, mean 156.3). A pre-anal pore discernible in most specimens; 17% of latter also having a femoral pore. Lamellae under fourth toe 18-22 (N 55, mean 19.7).

Scales on head strongly keeled. Scales along vertebral stripe weakly keeled; remaining dorsals strongly keeled, spinose scales higher but not much larger than ordinary dorsals.

A slight midlateral fold on body, coincident with white stripe. Gulars smooth, not mucronate.

Dorsal and lateral ground colour reddish-brown to greyish-brown. Head variegated with pale and dark brown, including a brownish-white band from orbit to orbit. Broad greyish-white vertebral stripe, 2-4 times as wide as dorsolateral stripe. Narrow creamy-white dorsolateral stripe, sometimes discernible only where crossing dark bands. Chocolate-brown or blackish-brown bands across body and base of tail, interrupted by vertebral stripe, extending down to narrow white midlateral stripe, and widest at contact with vertebral stripe. Throat and venter white, except occasionally for irregular grey streaks or vermiculations.

See also description and figure in Houston (1978: 46-47).

Distribution

Nullarbor Plain of Western Australia and South Australia (see Figure 1).

Remarks

Previously (Storr 1964), I included this population in the nominate race, but, as Houston (1978) was first to appreciate, it is distinct from that subspecies.

Material

Eastern Division (W.A.)

16 km NE Fraser Range (14184); Kanandah (39711, 41225); Naretha (19101-4, 51804-6) and 3 km W (29656); 95-115 km NNE Rawlinna (33399, 34022, 36475, 37053-4, 41216, 45358).

Eucla Division (W.A.)

20 km E Naretha (12222) and 32 km E (25866); 70 km NNE Rawlinna (36475, 41646, 43592-4); Seymour Downs (19105-10); Rawlinna (15209) and 10 km N (53756-7); Loongana (29174-5) and 5 km S (28706) and 18 km E (41603); Forrest (16502, 29335); 23 km S Reid (37674); 7 km NNW Eucla (66499-500); Mundrabilla (67261); Madura (24649); Cocklebidy (67249-53) and 10 km SSE (53428-30); 41 km SW Caiguna (66762); Toolinna Cave (56883); Toolinna Rockhole (45646-7, 66789-92); 20 km SW Balladonia HS (17418).

South Australia

77 km S Cook (36119).

Tympanocryptis cephalus Günther, 1867

Tympanocryptis cephalus Günther 1867, Ann. Mag. nat. Hist. (3) 20: 52. Nickol Bay, W.A.

Tympanocryptis cephalus gigas Mitchell 1948, Rec. S. Aust. Mus. 9: 65. Between Ashburton and Gascoyne Rivers, W.A.

Remarks

For my earlier paper (Storr 1964) I had only a single specimen (12495) from the vicinity of the type locality of *T. cephalus*. As it and the syntypes differed slightly in coloration and scalation from the populations further south and east, the latter were tentatively treated as a distinct subspecies, *T. c. gigas*. Subsequently the Western Australian Museum has accessed several adult specimens from the Pilbara coastal plain. These specimens do not differ substantially from those from elsewhere; the attempt to divide *cephalus* into subspecies is therefore abandoned.

***Tympanocryptis uniformis* Mitchell, 1948**

Tympanocryptis uniformis Mitchell 1948, Rec. S. Aust. Mus. **9**: 76. Near Darwin, N T.

Remarks

In my revision (Storr 1964) a juvenile specimen (13638) from 32 km SE of Luluigui in arid south-west Kimberley was identified as *T. uniformis*. I now find that this specimen agrees in coloration and scalation with northern juveniles of *Tympanocryptis lineata centralis* Sternfeld, e.g. 51275-6 from 50 km SE of Christmas Creek HS. From the latter, 13638 only differs in its shorter snout and more obtrusive eyes; these were the very characters that formerly induced me to identify 13638 as *uniformis*. However, the original description of *uniformis* indicates a very different lizard, Mitchell particularly drawing attention to its extremely stout body and almost uniform dorsal scalation.

References

- Houston, T. F. (1978). Dragon lizards and goannas of South Australia. (South Australian Museum: Adelaide.)
- Mitchell, F.J. (1948). A revision of the lacertilian genus *Tympanocryptis*. Rec. S. Aust. Mus. **9**: 57-86.
- Storr, G.M. (1964). The agamid lizards of the genus *Tympanocryptis* in Western Australia. J. Proc. R. Soc. West. Aust. **47**: 43-50.
- Storr, G.M. (1977). The *Amphibolurus adelaidensis* species group (Lacertilia: Agamidae) in Western Australia. Rec. West. Aust. Mus. **5**: 73-81.
- Storr, G.M. (1981). Three new agamid lizards from Western Australia. Rec. West. Aust. Mus. **8**: 599-607.